

Catéter central de inserción periférica (PICC) por ultrasonido enun hospital general de la Ciudad de México: experiencia de enfermería.

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Abstract

Obtaining secure venous access is a challenge for Nursing Staff (NS). The installation of an ultrasound-guided peripherally inserted central catheter (PICC) is innovative and has a high rate of successful installation on the first attempt (1,2). The intracavitary electrode (ICE) contributes to the timely initiation of infusion therapy (3,4,5). Managing the care of PICCs during insertion, maintenance, and removal promotes their duration without mechanical or systemic complications (3,6).

Objective

Describe the experience of the Nursing Staff in the ultrasound-guided installation of a Peripherally Inserted Central Catheter (PICC) at a general hospital in Mexico City.

Methods

The study was observational, descriptive, retrospective, and cross-sectional; subjects were selected based on the clinical records of individuals who underwent ultrasound-guided PICC insertion by NS. The study period spanned from 01/01/2022 to 31/12/2023. Convenience sampling was employed, and key variables included the number of attempts, insertion site, lumen, complications, reason for removal, bloodstream infection, and catheter tip residence by ICE.

Results

The NS installed 1194 ultrasound-guided PICCs, with 29.3% having an ICE. Among them, 51% had 2 lumens, and 66.5% were placed in the basilic vein. Successful placement was achieved in 77.5% on the first attempt, and 5.1% experienced complications during insertion. During the follow-up, 3% of the catheters presented complications. A majority 55.1% were removed due to patient discharge. Finally, 1.08% of the patients developed a catheter-related bloodstream infection, with an infection rate of 0.9% per 1000 catheter days.



Conclusions

The conclusion is that the installation of PICC guided by ultrasound by NS is a safe and effective method, with a high success rate on the first attempt. In addition, the inclusion of the ICE is a precise method that reduces exposure to X-rays and treatment delays; this favors the preservation of venous heritage and decreases the frequency of complications.



References

